KW Aufzugstechnik GmbH
Aufzugstechnik GmbH

KW Aufzugstechnik GmbH - Germany

HSK-01 Mounting / Function-Description	Version 103
Name:	HSK01-101-V103
Manufactor:	KW-Aufzugstechnik GmbH Zimmersmühlenweg 69 61440 Oberursel - Germany
Function:	Sensor for Detection of a magnetic field
Features:	Inputvoltage: 24V DC / Outputvoltage: 24V DC
Dimensions:	(Lenght x With x Height) 100,0 mm x 32,0 mm x 60,0 mm
Weight:	Ca. 100 Gramm without cable
Switching cycles:	Ca. 1.000.000 switchings
Protection class:	IP 65
Caution:	Class of dirt III
Environmental temperature:	0 to +45 °C degree

Function:

The magnetic panel HSK-01 has in the track 6 Hall sensors for the detection of the zone magnetic track on the V-shaft flag / rail.

The Hall switches have the function of the zone switch S71. The second zone S72 is obtained via the absolute value encoder system.

Für Schrauben M5

30

34.5   34.5

15.5

Mechanical mounting:

For this purpose there are 2 grooves, which are fitted with M5 screws for fixing.

The optimum distance (7 - 9mm) to the magnets on the shaft flag can be set via the long holes in the mounting bracket of the HSK01.
The adjustment is made by loosening the two M4 nuts and controlled sliding of the sensor.

Electrical connection:

The electrical connection is made by means of a prefabricated round cable with plug on the car calculator FKR-613 in the inspection box on the cabin roof.
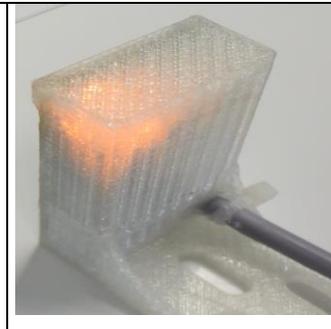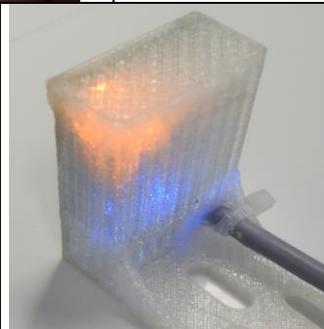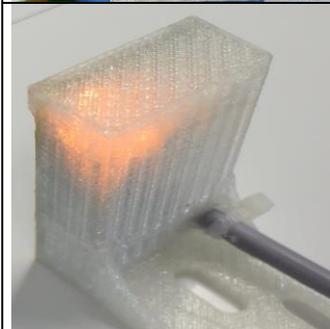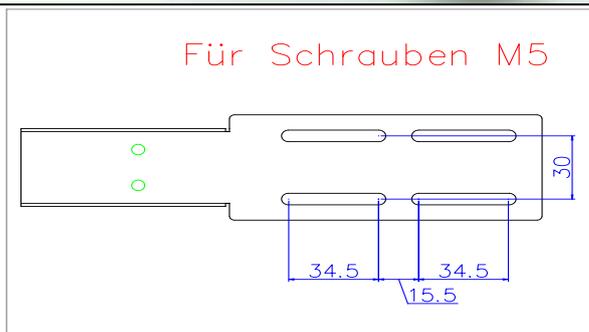
After the module is switched on for the first time, the yellow LED flashes rapidly. This is terminated when the sensor reads in the magnet.	If the sensor is switched on, e.g. the zone is active, this is indicated by a blue LED display.	If, on the other hand, the sensor is outside the zone, only the yellow LED standby indicator is on.

Attention!
If the flashing of the yellow LEDs should nevertheless occur during operation, an **error** has occurred. Possible causes: incorrect magnetic distribution or interference from other magnets.

Shaftcopysystem with UCM-Zone Nominal Speed < 1,60 m/s

V- Flag-mounting

Zone-magnet for S71

Fl. n

Fl. n-1

Northmagnet

Fl. 3

Exterial Zone

Inner Zone

Southmagnet-Red

Fl. 2

Fl.1

HSK01 – Magnetmounting with V-flag or mounting on the rail

The shaft copying system HSK01 consists of the shaft copying panel HSK01, the V-flags and the respective magnets.

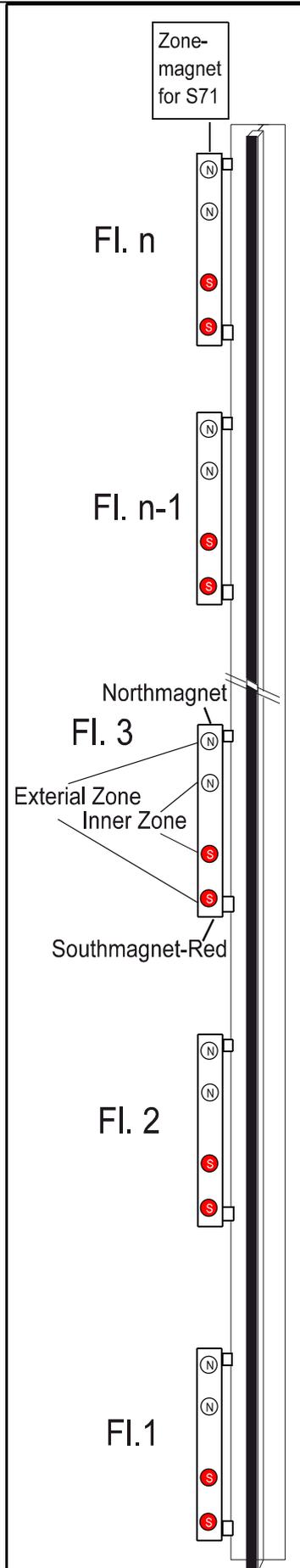On the V-flag or the rail, the North Magnet are always up, South Magnet (red) always down!

Four round magnets of each track form an outer and an inner zone.
The outer zone is responsible for the entrance with open door, the inner zone for the catch / UCM detection.

The HSK01 shaft coping spoiler is mounted on the cab roof.

The switching distance between the magnet and the HSK01 is 7-9mm!
The adjustment is made by loosening the two M4 nuts and controlled sliding of the sensor. (Look at the picture at the bottom left).

The electrical connection of the HSK01 is done with a prefabricated round cable with connector on the FKR-613.
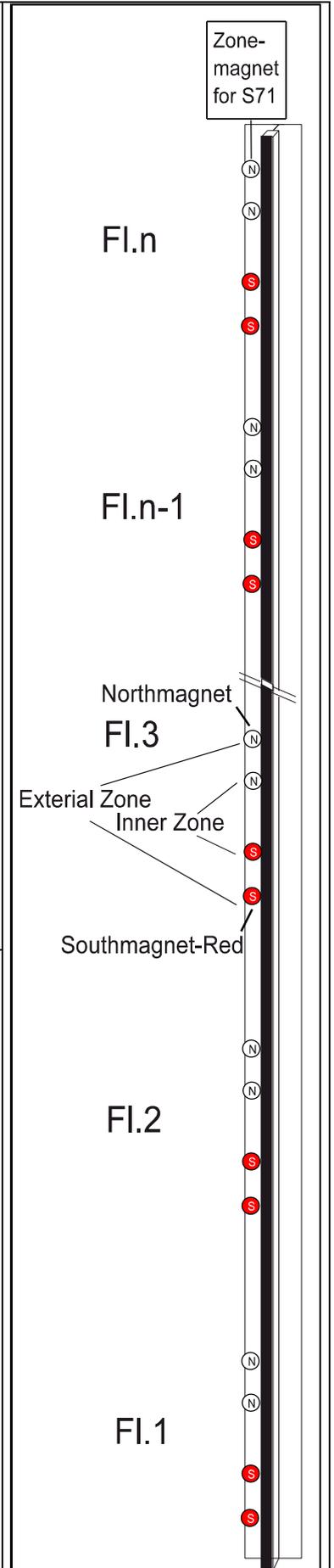
HSK01

V-Shaft-Flag-V101

Rail-mounting

Zone-magnet for S71

Fl.n

Fl.n-1

Northmagnet

Fl.3

Exterial Zone

Inner Zone

Southmagnet-Red

Fl.2

Fl.1

Schachtkopierungssystem mit UCM-Zone Nominal Speed >= 1,60 m/s

V- Flag-mounting

Zone-magnet for S71

Fl. n

X

Forced Delay Top
Southmagnet f. S11A

Fl. n-1

Northmagnet

Fl. 3

Exterial Zone
Inner Zone

Southmagnet-Red

Fl. 2

X   Fl.1

Forced Delay Bottom
Northmagnet f. S11B

HSK01 – Magnetmounting with V-flag or mounting on the rail Vnomianl >= 1,60 m/s

The shaft copying system HSK01 consists of the shaft copying panel HSK01, the V-flags and the respective magnets.

In addition, two HSK01 are required for the upper forced deceleration S11A and the lower forced deceleration S11B!

On the V-flag or the rail, the North Magnet are always up, South Magnet (red) always below!

Four round magnets of each track form an outer and an inner zone. The outer zone is responsible for the entrance with open door, the inner zone for the catch / UCM detection.

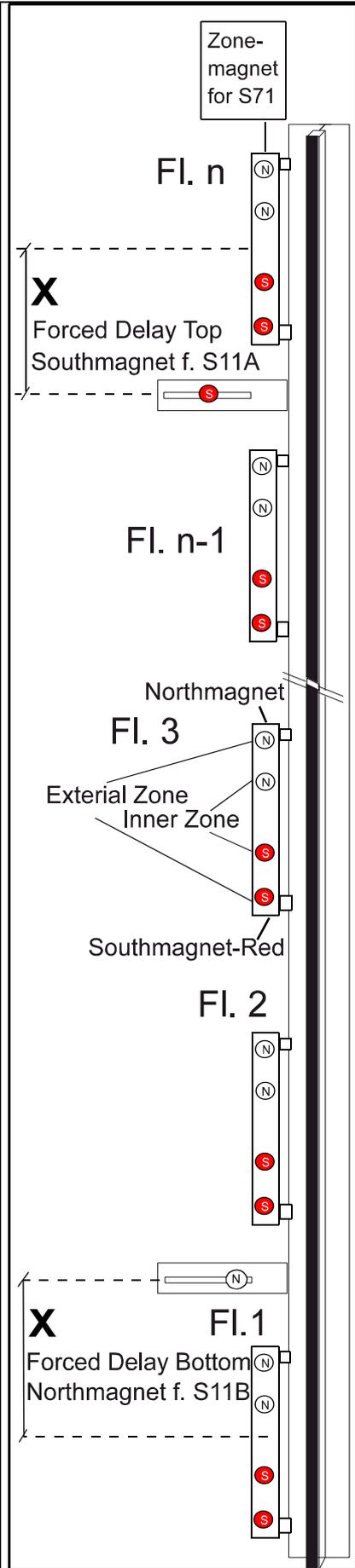The HSK01 shaft coping spoiler is mounted on the cab roof.

The switching distance between the magnet and the HSK01 is 7-9mm!
The adjustment is made by loosening the two M4 nuts and controlled sliding of the sensor. (Look at the picture at the bottom left).
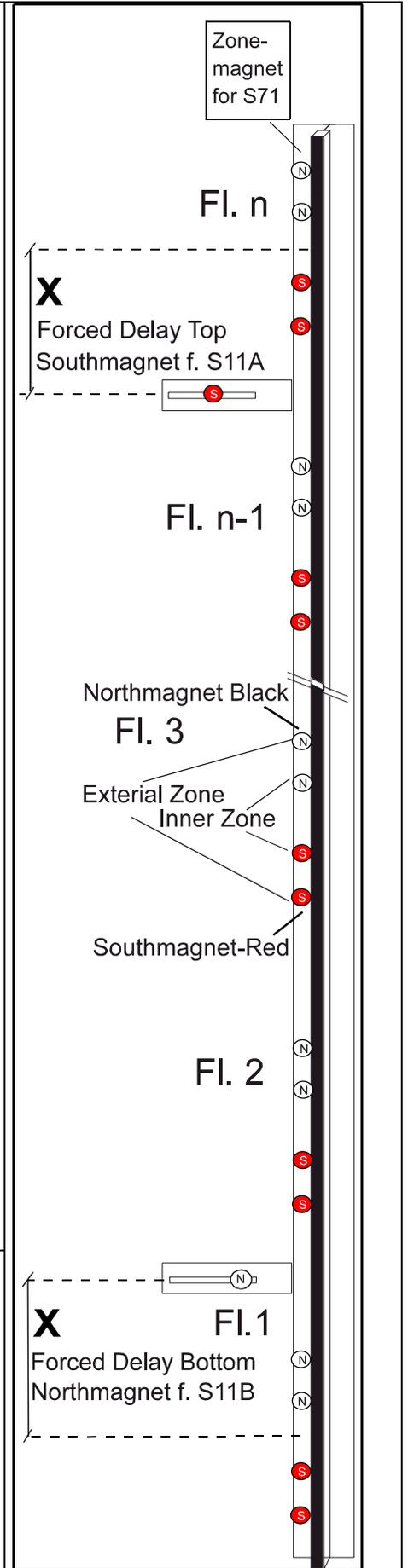
The distance X is to be set to the deceleration value at the speed V3 (menu B4).

Approximate guideline X:

1,6 m/s -> 3000 mm
2,0 m/s -> 3500 mm
2,5 m/s -> 4500 mm
3,0 m/s -> 5500 mm
4,0 m/s -> 7000 mm

Rail-mounting

Zone-magnet for S71

Fl. n

X

Forced Delay Top
Southmagnet f. S11A

Fl. n-1

Northmagnet Black

Fl. 3

Exterial Zone
Inner Zone

Southmagnet-Red

Fl. 2

X   Fl.1

Forced Delay Bottom
Northmagnet f. S11B